

# WHAT'S ARA?

## Atmospheric Re-entry Association











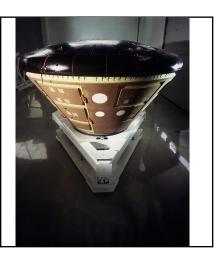




### **CREATION**

The ARD's success established the Aquitaine region's skills in the field of re-entry, skills based on the long experience acquired due to the fact that the main contributors in the development of the Nuclear french Deterrent are located in the region.

On the 21st of October 1998,
ARD, the first european
atmospheric re-entry
capsule, flew successfully.
This project, financed by
the European Space
Agency (ESA), was led by
EADS Astrium in
Aquitaine.



Following on from this success, the Association for the Development of Technologies for Mastering Atmospheric Re-entry (abbreviated to ARA) was founded on the 22nd of December 1999 on the initiative of the Aquitaine Regional Council, Bordeaux 1 University and EADS Astrium.

Other industrial partners in Aquitaine, CEA Cesta, Dassault Aviation, SNECMA Propulsion Solide and the INNOVALIS Aquitaine agency, quickly joined ARA.



## **MISSIONS**

This association gives form to a regional intent; its objective is to support research of the technologies related to atmospheric re-entry by developing exchanges between the Universities and engineers schools, the research laboratories, industry and the local, national and European institutions concerned and associated with federating projects:

The results are the setting up a research programme including 8 theses and a doctoral student post involving the ISM, TREFLE, LCTS, IMS and CRPP laboratories in Aquitaine for materials, ATD and GNC fields.

#### Involvement of the ARA in various events:

- July 2005: sponsored the 3rd International Planetary Probe Workshop.
- July 2006: participated in the AAAF congress in Arcachon on Atmospheric Re-entry by means of financing the participation of university doctoral students and SMEs.
- June 2006: participated in IPPW4: 4th International Planetary Probe workshop in Athens by means of financing the participation of university researchers
- Organised IPPW5: 5th International Planetary Probe workshop in Bordeaux



### **RESULTS**

22<sup>nd</sup> of October 2004: partnership agreement signed by Yannick d'Escatha, CNES's President, and Alain Rousset, Aquitaine Region's President, concerning the Expert and Pré-X, experimental atmospheric re-entry programmes.





Within Aerospace Valley, the world competitiveness cluster responsible for the Aeronautics, Space and Airborne Systems sectors, the ARA takes part in the management of the Strategic Activity Domain (DAS) related to access to space. Located mainly in the Aquitaine and Midi Pyrénées regions, Aerospace Valley groups together 75 large companies, 250 SMEs, 17 research centres and 42 training centres, amongst others.